

ARVAC

the ICAVT ALUMNI REFRESHER VACCINOLOGY COURSE 2024

COURSE OBJECTIVES

General objectives

The course aims at providing a refresher course and latest updates on immunization and vaccines to the alumni of the various existing advanced vaccinology training courses worldwide.

The International Collaboration of Advanced Vaccinology Training is a partnership of 35 vaccinology courses worldwide (www.icavt.org). Those trainings have different history, background, content and audiences but they all have trained, over the years, altogether, thousands of experts in the area of vaccinology.

However, alumni from those various trainings have constantly requested to attend again the trainings they attended initially or other ones to update their knowledge as the vaccinology area is in constant evolution and changes thanks to a strong research pipeline and a rich and diverse implementation community.

Instead of allowing alumni to attend the trainings they already completed again or attend another course and therefore reduce the number of new experts trained, ICAVT members have agreed to jointly develop a single common refresher course dedicated to their alumni. This course will provide annually the alumni from various background with lectures on the last updates on immunization and on new topics key for their daily activities.

The alumni refresher vaccinology course will provide updates in the following key areas of vaccinology: immunology, vaccine development, clinical trials, regulatory processes, vaccine-specific issues including new vaccines, vaccination strategies and policies, programme implementation, humanitarian emergencies, social, economic, political and ethical issues, financing, and communications. It will also provide lectures on new areas of the discipline uncovered by previous courses.

The course is limited in duration but focused on update relevant to alumni of all courses around the world.

By the end of the course, participants should be able to an updated knowledge on:

- (1) the last development in immunology,
- (2) the existing vaccines (combination, antigens included...),
- (3) the innovations and new platforms used to deliver traditional and new vaccines,
- (4) the immunization programs policies and strategies at global, regional, national, and local levels,
- (5) the regulatory processes for vaccines,
- (6) the vaccines production and quality control,
- (7) the role of communities and individuals for vaccines demands.

The ICAVT Alumni Refresher Vaccinology Course will help the audience to translate the updated scientific and epidemiological evidence into effective policy development and program implementation related to vaccines and immunization.

ICAVT Refresher Vaccinology Course also aims to update the scientific foundation of the alumni and their knowledge in vaccinology areas outside of their current expertise, showing the multifaceted constantly evolving aspects of vaccinology, allowing them to explore novel technologies and think more globally and holistically, and providing them with a unique skill set to develop their leadership in vaccinology.

Finally, this Refresher Vaccinology Course represents a unique networking opportunity where participants can form valuable and sustainable professional relationships beyond those developed during their initial vaccinology course and serves as a platform where problems to professional challenges can be shared, and solutions identified.

Specific objectives for each training activity (lectures, debates, interactive sessions, small group exercises and parallel workshops/sessions)

DAY 1

Updates on Meningitis Vaccines

- Describe the current situation of the Meningitis outbreaks including the circulating strains.
- Describe the vaccines currently available, the ones under development
- Describe the possible strategies for prevention and response.

Updates on NITAGs

- Describe the various forum and processes used at global, regional and national level (NITAGs) to make recommendations for vaccine use
- Discuss challenges and solutions to establish and strengthen NITAGs, as well as approaches to evaluate the functioning of NITAGs.

Challenges of adult immunization

- Describe the various needs for vaccination for adults
- Describe the challenges to reach out adults and get sufficient coverage
- Describe the best strategies to improve adults uptake

DAY 2

Reaching zero-dose children

- Describe the current global targets, achievements and challenges with respect to vaccinate hard-to-reach children including zero-dose children
- Identify the current major barriers to increasing or maintaining immunization coverage (weak health systems, missed opportunities, vaccine shortages, vaccine hesitancy, disruption of immunization, availability of quality data).
- Show how to apply best practices to increase vaccination coverage and options to simplify and facilitate vaccine delivery.

Vaccines and AMR

- Describe the current situation of antimicrobial resistance and its evolution
- Describe the determinants of antimicrobial resistance
- Describe the strategies aiming at reducing antimicrobial resistance
- Describe the role of vaccines in the antimicrobial resistance strategies

New clinical/regulatory framework: acceleration of vaccine licensure

- Identify the challenges and issues countries and manufacturers will face for a vaccine to be developed, produced and distributed in case of a pandemic
- Identify the areas where time can be gained without jeopardizing safety for a vaccine to be developed, produced and distributed (clinical and regulatory)



Panel 1: What's new on the vaccine policy and country support front?

- Describe the current global targets, achievements, and challenges with respect to immunization coverage worldwide.
- Discuss how to increase vaccination coverage and options to simplify and facilitate vaccine delivery.
 - Describe the latest recommendations for immunization and vaccines from the WHO (the Strategic Advisory Group of Experts on Immunization, SAGE).
 - Describe the latest policies for support to countries immunization programs at WHO.
 - Describe the latest policies for support to countries immunization programs at GAVI, the vaccine alliance.

DAY 3

Panel 2: Update on vaccines confidence

- Describe the spectrum of vaccine hesitancy/acceptance/anti-vaccine sentiments
- How to measure vaccine hesitancy and for what?
- Describe the determinants of vaccine hesitancy
- Describe the individual and collective solutions trying to address vaccine hesitancy

Maternal Immunization

- Discuss mechanisms of maternal antibody transfer across the placenta in healthy women and the potential for decreased transfer to those with underlying medical conditions such as HIV or malaria.
- Explain when, where, and why maternal immunization should be considered.
- Describe the impact of maternal immunization on the prevention of neonatal tetanus, pertussis, and influenza disease.
- Discuss potential pathogens and vaccines that may be suitable for maternal immunization.

Lower-efficacy vaccines

- Describe the concept of efficacy and effectiveness
- Describe the evolution of vaccines efficacy over the years
- Describe how low-efficacy vaccines have a place in the overall vaccine-preventable diseases prevention strategies

Updates on Dengue and Chikungunya vaccines

- Describe the burden of disease related to arboviruses
- Describe the current and future vaccines (composition, mechanism of action, recommended schedules).